

**REMARKS**

Claims 1-4 and 6-23 are now pending in the application. By this Paper, Claim 1 has been amended. The basis for this amendment can be found throughout the specification, claims, and drawings originally filed. No new matter has been added. The preceding amendment and the following remarks are believed to be fully responsive to the outstanding Office Action and are believed to place the application in condition for allowance.

The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendment and remarks contained herein.

**REJECTION UNDER 35 U.S.C. § 103**

Claims 1-23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Sharood et al. (U.S. Pat. No. 6,453,687) alternatively in view of Kameshima et al. (JP 56010639) or Schulak (U.S. Pat. No. 5,743,109).

This rejection is respectfully traversed because none of the cited prior art teaches analyzing energy consumption based on weather data.

Independent Claim 1 calls for a method of managing a refrigeration system including transmitting energy consumption, maintenance indicator, and food condition data from the refrigeration system to a management center, wherein energy consumption is analyzed based on weather data. See Specification at pg. 4, Paragraph [0010] and at pg. 4, Paragraph [0012]. The energy consumption, maintenance indicator, and food condition data are analyzed at the management center to monitor and diagnose the performance of the refrigeration system in response to the analyzing.

See Specification at pg. 4, Paragraph [0010] and at pg. 4, Paragraph [0012]. Sharood, Kameshima, and Schulak fail to teach or suggest such a relationship.

The Examiner admits that Sharood fails to teach a method of managing a refrigeration system including analyzing energy consumption data. See Office Action mailed February 4, 2005 at pg. 3. The Examiner states, however, that Kameshima and Schulak demonstrate that the effect of outside weather/temperature conditions on the energy efficiency of refrigeration systems is well-known and that “it would have been obvious to one of ordinary skill in the art at the time the invention was made to include such weather-related data in the analysis of the efficiency of the system of Sharood.” See Office Action mailed February 4, 2005 at pg. 3.

Applicants respectfully submit that Kameshima and Schulak fail to teach a method of managing a refrigeration system including analyzing energy consumption based on weather data. Applicants therefore respectfully disagree with the Examiner that it would have been obvious to one of ordinary skill in the art to modify Sharood to include energy consumption analysis based on weather data.

Applicants respectfully submit that Kameshima fails to teach analyzing *weather data*. Kameshima teaches a predicting device (1) that *predicts* air conditioning load and weather patterns. The predicted air conditioning load and weather patterns are used to determine an optimal refrigerator operating mode – not analyze energy consumption - using an operating device (2) and memory unit (3). See English Abstract of Kameshima. Further, the predictions of Kameshima are not “weather data,” but are merely *predictions* of future weather patterns. Applicants note that the term “data” is ordinarily understood to mean “factual information.” See Merriam-Webster’s Collegiate

Dictionary, Merriam-Webster, Incorporated (1999) (Reproduced in relevant part and attached herewith). The weather predictions taught by Kameshima cannot be considered weather “data,” as predictions attempt to foretell the future and would not be considered *factual*. Therefore, Applicants respectfully submit that Kameshima fails to teach or suggest a method of managing a refrigeration system including analyzing energy consumption based on weather data.

Schulak fails to teach or suggest analyzing weather conditions for use in analyzing energy consumption of a refrigeration system. Schulak teaches an energy transfer system (12) for use with a household appliance, such as a refrigerator, that includes a condenser (16) disposed within a compartment (24). See Schulak at Col. 2, Ins. 58-66. The compartment is coupled to outside air via conduits (28, 30) to transfer heat from the condenser to outside air. See Schulak at Col. 3, Ins. 10-18. Schulak merely notes that the outside air must be “low enough” to allow a reduction in condenser temperature. See Schulak at Col. 4, Ins. 49-54. Schulak does not teach or suggest using data indicative of the outside air temperature in controlling operation of the energy transfer system. Therefore, Schulak fails to teach or suggest a method of managing a refrigeration system including energy consumption analysis based on weather data.

Because Sharood does not disclose a method of managing a refrigeration system including analyzing energy consumption based on weather data, and none of the cited references cures this deficiency of Sharood, Applicants’ invention is not taught or suggested by the prior art. Thus, it is believed that independent Claim 1, as well as Claims 2-4 and 6-23, dependent therefrom, are in a condition for allowance in light of

the art of record. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection.

#### CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

Dated:

May 4, 2005

By:

Michael Malinzak  
Michael Malinzak, Reg. No. 43,770

HARNESS, DICKEY & PIERCE, P.L.C.  
P.O. Box 828  
Bloomfield Hills, Michigan 48303  
(248) 641-1600

MM/MHS:ca



# Merriam- Webster's Collegiate® Dictionary

TENTH EDITION

Merriam-Webster, Incorporated  
Springfield, Massachusetts, U.S.A.



GENUINE MERRIAM-WEBSTER

The name *Webster* alone is no guarantee of excellence. It is used by a number of publishers and may serve mainly to mislead an unwary buyer.

*Merriam-Webster*™ is the name you should look for when you consider the purchase of dictionaries or other fine reference books. It carries the reputation of a company that has been publishing since 1831 and is your assurance of quality and authority.



Copyright © 1999 by Merriam-Webster, Incorporated

Philippines Copyright 1999 by Merriam-Webster, Incorporated

# Merriam-Webster's Collegiate Dictionary

ISBN 0-87779-711-0

TENTH EDITION

Merriam-Webster's Collegiate® Dictionary, Tenth Edition principal copyright 1993

COLLEGIATE is a registered trademark of Merriam-Webster, Incorporated

All rights reserved. No part of this book covered by the copyrights hereon may be reproduced or copied in any form or by any means—graphic, electronic, or mechanical, including photocopying, taping, or information storage and retrieval systems—without written permission of the publisher.

Made in the United States of America

456WC02010099

Merriam-Webster, Incorporated  
Springfield, Massachusetts, U.S.A.

festive of 0  
y)  
duct of a  
f the 19th  
inhabitant  
E  
x believed  
land or to  
he part of  
the part  
longier, fr.  
3c) 1: a  
DAMAGE 3  
ace where  
er (the  
xposing to  
n — **dan-**  
ean, bring-  
applies to  
carefully  
t and con-  
zardous to  
ncertainty  
mplies the  
applies to  
ments)  
of Scand  
ng loosely  
er-on or  
rmally ex-  
d climbing  
gling) ~  
ncertainly  
that dan-  
sh hero of  
ams, gives  
n a den of  
canonical  
): any of  
ic of Den-  
2 pl Dan-  
ough  
wet **syn**  
): a male  
ur] (1828)  
dmirer of  
k daphne]  
mezecon  
a corolla  
ansformed  
f a genus  
with bira-  
FLEA  
towned in  
ig; akin to  
nd trim in  
d lively in  
n  
h spots of  
d rounded  
ground 2  
mark with  
g through  
or patches  
: an anti-  
an, couple  
couple  
(1606) ar-  
spoken in  
dare [ME  
itar] (1st &  
rbal auxil-  
vord) (she  
nt courage  
ion esp. as

roof of courage (*dared him to jump*) b: to confront boldly: **DEFY**  
ked the anger of his family) 2: to have the courage to contend  
inst, venture, or try (the actress *dared* a new interpretation of this  
role) — **dar-er** \ˈdär-ər, -der-\ n  
1594) 1: an act or instance of daring: **CHALLENGE** (foolishly  
a ~) 2: imaginative or vivacious boldness: **DARING**  
dev-il \ˈdär-de-vl, -der-\ n (1794): a recklessly bold person —  
dev-il-ry \-vɪl-rē-\ n — **dare-devil-try** \-vɪl-trē-\ n  
devil adj (1832): recklessly and often ostentatiously daring **syn**  
**ADVENTUROUS**  
ful adj (1605) obs: **DARING**  
n't \ˈdär-ənt, -der-\: dare not: **dared not**  
say \ˈdär-sä, -der-\ vt (13c): venture to say: think probable —  
in pres. 1st sing. ~ vi: **AGREE, SUPPOSE** — used in pres. 1st sing.  
ling adj (1582): venturesomely bold in action or thought **syn** see  
VENTUROUS — **dar-ing-ly** \-ɪŋ-lē-\ adv — **dar-ing-ness** n  
ling n (1651): venturesome boldness  
ee-ling \ˈdär-jē-lɪŋ-\ n [*Darjeeling*, India] (1907): a tea of high  
lity grown esp. in the mountainous districts of northern India  
ark \ˈdärk-\ adj [ME *derk*, fr. OE *deorc*; akin to OHG *tarchannen* to  
(bef. 12c) 1: a: devoid or partially devoid of light: not receive-  
reflecting, transmitting, or radiating light b: transmitting only a  
tion of light 2: a: wholly or partially black b of a color: of low  
very low lightness 3: a: arising from or showing evil traits or  
res: **EVIL** (the ~ powers that lead to war) b: **DISMAL, GLOOMY**  
d a ~ view of the future) c: lacking knowledge or culture 4  
not clear to the understanding 5: not fair in complexion: **SWARTHY**  
SECRET (kept his plans ~) 7: possessing depth and richness (a ~  
ice) 8: closed to the public (the theater is ~ in the summer) **syn**  
OBSCURE — **dark-ish** \ˈdär-kɪʃ-\ adj — **dark-ly** adv — **dark-ness**  
ark n (13c) 1: a: a place or time of little or no light: **NIGHT, NIGHT-**  
ALL b: absence of light: **DARKNESS** 2: a dark or deep color — in  
the dark 1: in secrecy (most of his dealings were done in the dark)  
in ignorance (kept the public in the dark about the agreement)  
ark vi (14c) obs: to grow dark ~ vt: to make dark  
ark adaptation n (1909): the phenomena including dilation of the  
uppl, increase in retinal sensitivity, shift of the region of maximum  
luminosity toward the blue, and regeneration of visual purple by which  
the eye adapts to conditions of reduced illumination — **dark-adapt-**  
d \ˈdärk-ə-ˈdäp-təd-\ adj  
ark age n (1730) 1: a time during which a civilization undergoes a  
cline: as, a pl. cap *D&A*: the European historical period from about  
A.D. 476 to about 1000; broadly: **MIDDLE AGES** b often pl, often cap  
D&A: the Greek historical period of three to four centuries from about  
1100 B.C. 2: a often pl, often cap *D&A*: the primitive period in the  
development of something (in the 1890s, way back in baseball's *Dark*  
ages — R. W. Creamer) b often pl, often cap *D&A*: a state of stagna-  
tion or decline  
ark-en \ˈdär-kən-\ vb **dark-ened**; **dark-en-ing** \ˈdär-kə-nɪŋ-\ vi (14c)  
1: to grow dark: to become obscured 2: to become gloomy ~ vt 1  
to make dark 2: to make less clear: **OBSCURE** (the financial crisis  
ed the future of the company) 3: **TAINT, TARNISH** 4: to cast a  
loom over ~ 5: to make of darker color — **dark-en-er** \-kə-nər-\ n  
ark field n (1865): the dark area that serves as the background for  
objects viewed in an ultramicroscope  
ark-field microscope n (1926): **ULTRAMICROSCOPE**  
ark horse n (1831) 1: a usu. little known contender (as a race-  
horse) that makes an unexpectedly good showing b: an entrant in a  
contest that is judged unlikely to succeed 2: a political candidate  
unexpectedly nominated usu. as a compromise between factions  
ark lantern n (1650): a lantern that can be closed to conceal the  
light  
ark-ly \ˈdär-kəl-\ vi **dar-kled**; **dar-ling** \-k(ə-)lɪŋ-\ [back-formation  
fr. *darling*] (1800) 1: a: to become clouded or gloomy b: to grow  
dark 2: to become concealed in the dark  
ark-ling \ˈdär-klɪŋ-\ adv [ME *derkelyng*, fr. *derk* dark + *-lyng* -ling]  
(15c): in the dark  
ark-ling adj (1739) 1: **DARK** 2: done or taking place in the dark  
darkling beetle n (1816): **TENEBRIONID**  
ark matter n (1982): nonluminous matter not yet directly detected  
by astronomers that is hypothesized to exist because the visible matter  
in the universe is insufficient to account for various observed gravita-  
tional effects  
ark reaction n (1927): any of a series of chemical reactions in photo-  
synthesis not requiring the presence of light and involving the reduc-  
tion of carbon dioxide to form carbohydrate; also: **CALVIN CYCLE**  
ark-room \ˈdärk-rüm, -rüm-\ n (1841): a room with no light or with  
a safelight for handling and processing light-sensitive photographic  
materials  
ark-some \ˈdärk-səm-\ adj (ca. 1530): gloomily somber: **DARK**  
arky or dark-ly \ˈdär-kē-\ n, pl **darkies** (1775) usu offensive: a black  
person  
dar-ling \ˈdär-lɪŋ-\ n [ME *derling*, fr. OE *deorling*, fr. *deore* dear] (bef.  
12c) 1: a dearly loved person 2: **FAVORITE**  
darling adj (1509) 1: dearly loved: **FAVORITE** 2: very pleasing  
CHARMING — **dar-ling-ly** \-lɪŋ-lē-\ adv — **dar-ling-ness** n  
darn \ˈdärn-\ vb [per. fr. F dial. *darnier*] vt (ca. 1600) 1: to mend  
with interlacing stitches 2: to embroider by filling in with long run-  
ning or interlacing stitches ~ vi: to do darn — **darn-er** n  
darn n (1720): a place that has been darned (a sweater full of ~s)  
darn adj or adv [euphemism] (1781): **DAMNED**  
darn vb (1781): **DAMN** — **darned** \ˈdärn(d)-\ adj or adv  
darn n (1840): **DAMN**  
dar-nel \ˈdär-nəl-\ n [ME] (14c): any of several usu. weedy grasses  
(genus *Lolium*)  
darning needle n (1761) 1: a long needle with a large eye for use in  
darning 2: **DRAGONFLY, DAMSELFLY**  
dart \ˈdärt-\ n [ME, fr. MF, of Gmc origin; akin to OHG *tart* dart; OE  
*daroth*] (14c) 1: a *archaic*: a light spear b (1): a small missile usu.  
with a pointed shaft at one end and feathers at the other (2) pl but sing  
in constr: a game in which darts are thrown at a target 2: a: some-  
thing projected with sudden speed; esp: a sharp glance b: something  
causing sudden pain or distress (~s of sarcasm) 3: something with a

slender pointed shaft or outline; *specif*: a stitched tapering fold in a  
garment 4: a quick movement (made a ~ for the door)  
dart vt (1580) 1: to throw with a sudden movement 2: to thrust or  
move with sudden speed 3: to shoot with a dart containing a usu.  
tranquilizing drug ~ vi: to move suddenly or rapidly (~ed across  
the street)  
dart-board \ˈdärt-bórd, -bórd-\ n (1901): a usu. circular board (as of  
compressed bristles) used as a target in the game of darts  
darter \ˈdär-tər-\ n (1813) 1: **ANHINGA** 2: any of numerous small  
American freshwater bony fishes (esp. genera *Ammocrypta*, *Etheos-*  
*toma*, and *Percina* of the family *Percidae*)  
Dar-win-i-an \ˈdär-wi-nē-ən-\ adj (1860): of or relating to Charles  
Darwin, his theories esp. of evolution, or his followers — **Darwinian**  
n  
Dar-win-ism \ˈdär-wə-ni-zəm-\ n (1864): a theory of the origin and  
perpetuation of new species of animals and plants that offspring of a  
given organism vary, that natural selection favors the survival of some  
of these variations over others, that new species have arisen and may  
continue to arise by these processes, and that widely divergent groups  
of plants and animals have arisen from the same ancestors; broadly  
: biological evolutionism — **Dar-win-ist** \-wə-nɪst-\ n or adj  
Dar-win's finches \ˈdär-wənz-\ n pl [Charles Darwin] (1947): finches  
of a subfamily (*Geospizinae*) having great variation in bill shape and  
confined mostly to the Galapagos islands  
Dar-win tulip \ˈdär-wən-\ n (1889): a tall late-flowering tulip with  
the flowers single and of one color  
dash \ˈdæʃ-\ vb [ME *dassen*] vt (13c) 1: to break by striking or  
knocking 2: to knock, hurl, or thrust violently 3: **SPLASH, SPATTER**  
4: a: **RUIN, DESTROY** (the news ~ed his hopes) b: **DEPRESS, SADDEN** c  
: to make ashamed 5: to affect by mixing in something different (his  
delight was ~ed with bitterness over the delay) 6: to complete, exe-  
cute, or finish off hastily — used with down or off (~ed down a drink)  
(~off a letter) 7 [euphemism]: **DAMN** 4 ~ vi 1: to move with  
sudden speed (~ed through the rain) 2: **SMASH**  
dash n (14c) 1: a *archaic*: **BLOW** b (1): a sudden burst or splash  
(2): the sound produced by such a burst 2: a: a stroke of a pen b  
: a punctuation mark — that is used esp. to indicate a break in the  
thought or structure of a sentence 3: a small usu. distinctive addition  
(a ~ of salt) (a ~ of humor) 4: flashy display 5: animation in  
style and action 6: a sudden onset, rush, or attempt b: a short  
fast race 7: a long click or buzz forming a letter or part of a letter (as  
in Morse code) 8: **DASHBOARD** 2  
dash-board \ˈdæʃ-bórd, -bórd-\ n (1846) 1: a screen on the front of  
a usu. horse-drawn vehicle to intercept water, mud, or snow 2: a  
panel extending across the interior of a vehicle (as an automobile) be-  
low the windshield and usu. containing dials and controls  
dashed \ˈdæʃt-\ adj (ca. 1889): made up of a series of dashes  
dash-er \ˈdæ-shər-\ n [origin unknown] (ca. 1899): **TARO**  
dash-er \ˈdæ-shər-\ n (1790) 1: a dashing person 2: one that dashes;  
*specif*: a device having blades for agitating a liquid or semisolid  
dashi \ˈdä-ʃi-\ n [Jp, broth] (ca. 1961): a fish broth made from  
dried bonito  
dash-shi-ki \ˈdä-shē-kē, -dä-, -da-\ n [modif. of Yoruba *dāṣṣíkí*] (ca. 1968)  
: a usu. brightly colored loose-fitting pullover garment  
dash-ing adj (1796) 1: marked by vigorous action: **SPIRITED** (a ~  
young horse) 2: marked by smartness esp. in dress and manners —  
**dash-ing-ly** \-ɪŋ-lē-\ adv  
dash-pot \ˈdæʃ-pət-\ n (1861): a device for cushioning or damping a  
movement (as of a mechanical part) to avoid shock  
das-sie \ˈdä-sē-\ n [Afrik] (1786): **HYRAX**  
das-tard \ˈdäs-tərd-\ n [ME] (15c) 1: **COWARD** 2: a person who acts  
treacherously or underhandedly  
das-tard-ly \-lē-\ adj (1542) 1: **COWARDLY** 2: characterized by un-  
derhandedness or treachery (a ~ attack) (a ~ villain) **syn** see **COW-**  
**ARDLY** — **das-tard-li-ness** n  
da-ta \ˈdä-tə, -dä- also -dä-\ n pl but sing or pl in constr, often attrib. [L.  
pl. of *datum*] (1646) 1: factual information (as measurements or  
statistics) used as a basis for reasoning, discussion, or calculation (the  
~ is plentiful and easily available — H. A. Gleason, Jr.) (comprehen-  
sive ~ on economic growth have been published — N. H. Jacoby) 2  
: information output by a sensing device or organ that includes both  
useful and irrelevant or redundant information and must be processed  
to be meaningful 3: information in numerical form that can be digi-  
tally transmitted or processed  
usage *Data* leads a life of its own quite independent of *datum*, of  
which it was originally the plural. It occurs in two constructions: as a  
plural noun (like *earnings*), taking a plural verb and plural modifiers  
(as *these, many, a few*) but not cardinal numbers, and serving as a  
referent for plural pronouns (as *they, them*); and as an abstract mass  
noun (like *information*), taking a singular verb and singular modifiers  
(as *this, much, little*), and being referred to by a singular pronoun (*it*).  
Both constructions are standard. The plural construction is more  
common in print, evidently because the house style of several publish-  
ers mandates it.  
data bank n (1966): **DATABASE**  
da-ta-base \ˈdä-tə-bās, -dä- also -dä-\ n (ca. 1962): a usu. large collec-  
tion of data organized esp. for rapid search and retrieval (as by a com-  
puter)  
data processing n (1954): the converting of raw data to machine-  
readable form and its subsequent processing (as storing, updating,  
combining, rearranging, or printing out) by a computer — **data pro-**  
**cessor** n  
data structure n (1963): any of various methods of organizing data  
items (as records) in a computer  
date \ˈdæt-\ n [ME, fr. OF, ultim. fr. L. *dactylus* — more at **DACTYL**]  
(14c) 1: the oblong edible fruit of a palm (*Phoenix dactylifera*) 2  
: the tall palm with pinnate leaves that yields the date

\ə\ about \ə\ kitten, F table \ər\ further \ə\ ash \ə\ ace \ə\ mop, mar  
\a\ out \ch\ chin \e\ bet \ē\ easy \g\ go \i\ hit \i\ ice \j\ job  
\j\ sing \o\ go \o\ law \oi\ boy \th\ thin \th\ the \ü\ loot \u\ foot  
\y\ yet \zh\ vision \ä, k, p, æ, œ, ue, \ see Guide to Pronunciation

**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**